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4/PARTS

## Description

Add-drop multiplexing device and optical wavelength division multiplex transmission system

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The invention relates to add-drop multiplexing devices and an optical wavelength division multiplex (WDM) transmission system realized with these devices.

10 In purely optical WDM networks, transmission channels with different wavelengths are used for establishing data connections. At the request of customers, connections between any desired connecting points are to be made available by the network operator. To 15 establish these connections, until now electronically operating cross-connectors/connecting-through devices were used. The same principle can also be used in principle for purely optically operating networks. However, here the use of remote-configurable optical 20 switching devices is problematical and very cost-intensive.

It is therefore an object of the invention to provide 25 an add-drop multiplexing device and a WDM transmission system which can be realized with lower expenditure.

This object is achieved by an add-drop multiplexer according to patent claim 1. An associated transmission system is specified in an independent 30 claim. Advantageous developments are specified in the subclaims.

In the invention, a modular design is used, allowing different module types to be used according to 35 requirements. Generally, only a small number of the switched connections have to be frequently reconfigured, while generally the majority of the connections are static and never have to be

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